

Energy Efficiency Testing and Certification

Andrew N. Vourlos, VS Quality Manager
Underwriters Laboratories, Inc.
1285 Walt Whitman Rd.
Melville, NY 11747



Agenda

UL – General Overview

Evaluating Products for Energy Efficiency

How Certifications are Maintained

Laboratory Accreditation – Energy Efficiency

Q & A



UL – General Overview

A not-for-profit product safety testing company founded in 1894 that certifies products for compliance to safety standards.

- Samples of a product submitted by manufacturers for certification are tested and evaluated. If UL decides the product fulfills all applicable requirements it authorizes the manufacturer to apply a certification mark to production of the samples submitted, or issues a certificate or notification that the product is now certified by UL.
- Testing and evaluation of samples of products submitted for certification can be performed in UL's laboratories or in laboratories qualified by UL assessment and ongoing monitoring
- Certification continues until the manufacturer requests termination or fails to fulfill a requirement. UL must evaluate modifications to certified products before the modified product is authorized to bear the Mark or be considered certified.
- Certification services also offered to products that comply with the U.S. EPA ENERGY STAR® program



Evaluating Products for Energy Efficiency

UL has offered energy efficiency testing services for over a decade.

- Energy verification services offered to address third party certification requirements for certain products regulated by Natural Resources Canada (NRCan) and the U.S. Department of Energy electric motor efficiency program (re: UL EVS program)
- Certain UL laboratories register with the California Energy Commission annually to offer energy efficiency testing services for our customers
- Launch of Energy Efficiency Certification (EEC) program in 2010 offered testing services to a greater number of categories in preparation for UL's participation as an approved certification body for the U.S. EPA ENERGY STAR® program
- UL laboratories with specific energy efficiency testing capabilities are accredited to conduct the test methods referenced by ENERGY STAR® program requirements for the particular product category



How Certifications are Maintained

UL maintains the certifications of products it evaluates through various mechanisms

- Factory inspections (Follow-Up Services, FUS₁) – UL inspection representatives conduct quarterly (at a minimum) visits at manufacturing locations for products that were evaluated by UL
- Market surveillance (verification testing₂) – UL canvases the market place and purchases products and retests them for determining continued
- File reviews₃ – UL reevaluates products it has certified when standards used as the basis for a certification change



1 – used for safety certifications; 2 – used for energy efficiency certifications; 3 – used in both

Laboratory Accreditations

UL obtains accreditations for its laboratories when required by regulation and/or market demand

- Energy Efficiency – driven predominantly by the U.S. EPA ENERGY STAR® program
- Accredited laboratories for battery charging systems (to test methods referenced by ENERGY STAR)
 - UL International Germany GmbH
 - UL Japan Inc.
 - UL Inc. (San Jose, CA)
- Lighting controls –no current requirement for accreditation
- Data acceptance – although not accreditation, UL will evaluate manufacturer laboratories to requirements established under its Data Acceptance Programs (DAP) to recognize capable manufacturers (1st party labs)



Q&A



Andrew N. Vourlos
Global Quality Manager
Verification Services



Underwriters Laboratories Inc.
1285 Walt Whitman Road, Melville, NY 11747-3081
T: +1 631 546 2739
M: 631-871-7723
F: 631-439-6192
E: Andrew.N.Vourlos@us.ul.com / W:ul.com